

**A NOVEL MICROORGANISM ISOLATED FROM CHINESE ELM (*ULMUS*
SP.) AND PROCESS FOR PREPARING EXOPOLYSACCHARIDES BY
EMPLOYING THE MICROORGANISM**

Abstract of the Disclosure

5 The present invention relates to a novel *Enterobacter* sp. isolated from the root bark of Chinese elm, which produces immunostimulating exopolysaccharides with anticancer activity, a process for preparing the exopolysaccharides by fermenting the said microorganism in a culture medium, exopolysaccharides prepared by the process and their uses thereof. The exopolysaccharides of the invention have a molecular weight of 100,000 to 1,000,000 and consist of 40-75% of total sugar, 5-15% of total acidic sugar and 10-25% of total protein. The exopolysaccharides exhibits a high immunoenhancing activity in immune cell proliferation, direct mitogenicity and mixed lymphocyte reaction, and further a high anticancer activity *in vivo* by virtue of immunostimulation. Moreover, the production of the exopolysaccharides by fermentation of a microorganism, makes it possible to provide the exopolysaccharides with a uniform quality and mass production without destruction of the plant species. The exopolysaccharides of the subject invention have practical uses as an active ingredient for anticancer agents, immunoenhancers and foodstuffs.

10

15

20

PATENT

25 S:\DOCS\MCK\MCK-4724.DOC
072401